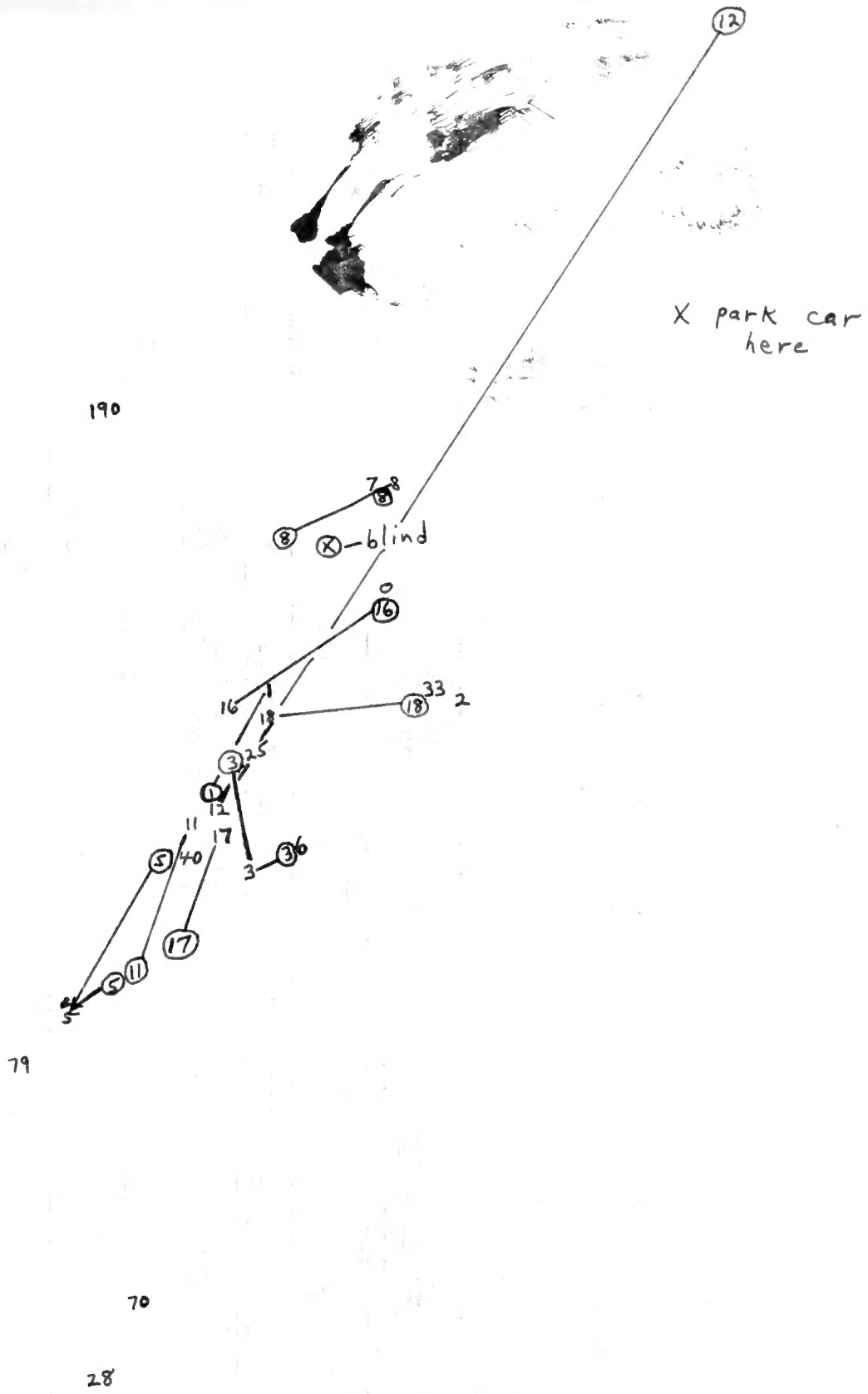
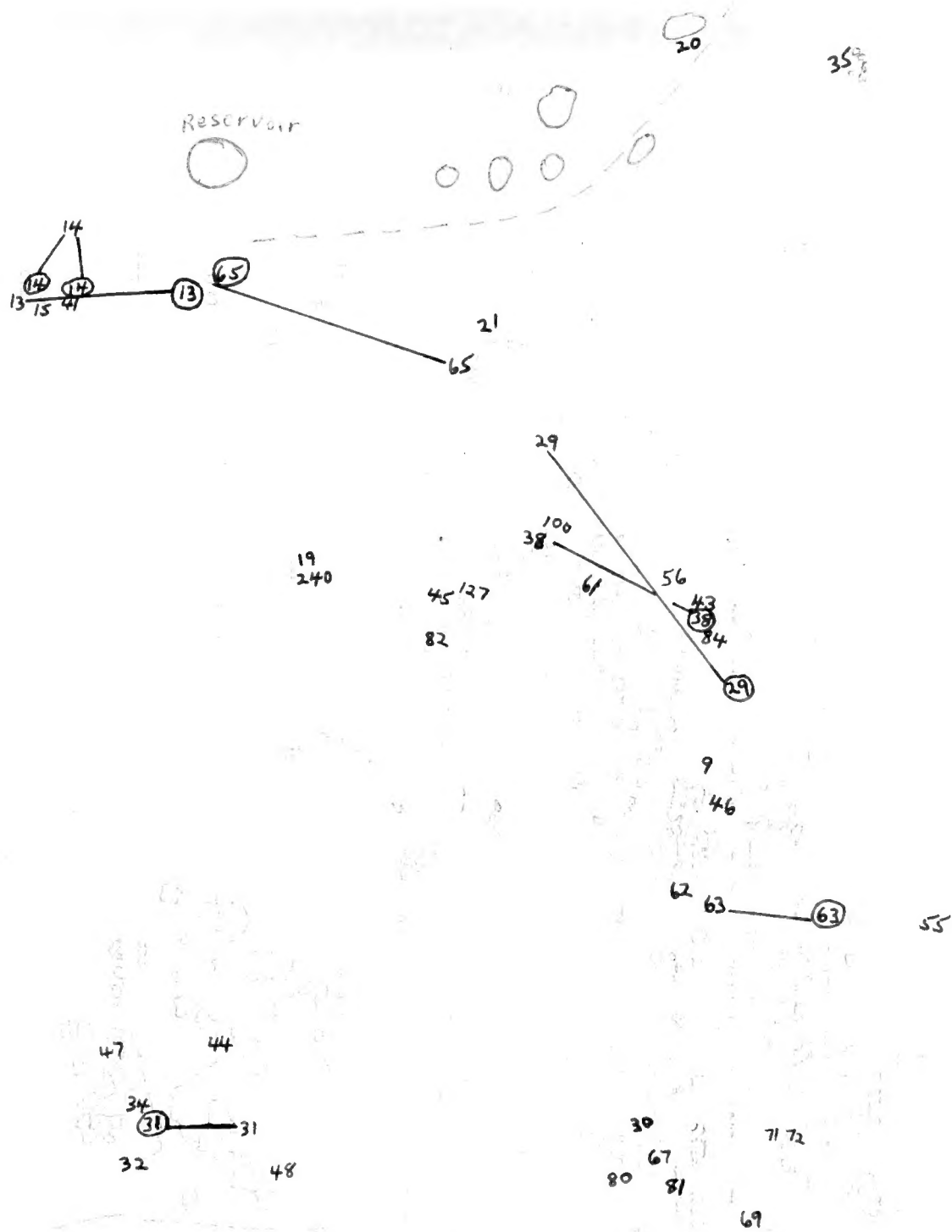


Capture Locations, 1958 (Sceloporus orcutti)



②9 = recapture site, 1961.

Capture Locations, 1958 (Sceloporus orcutti)

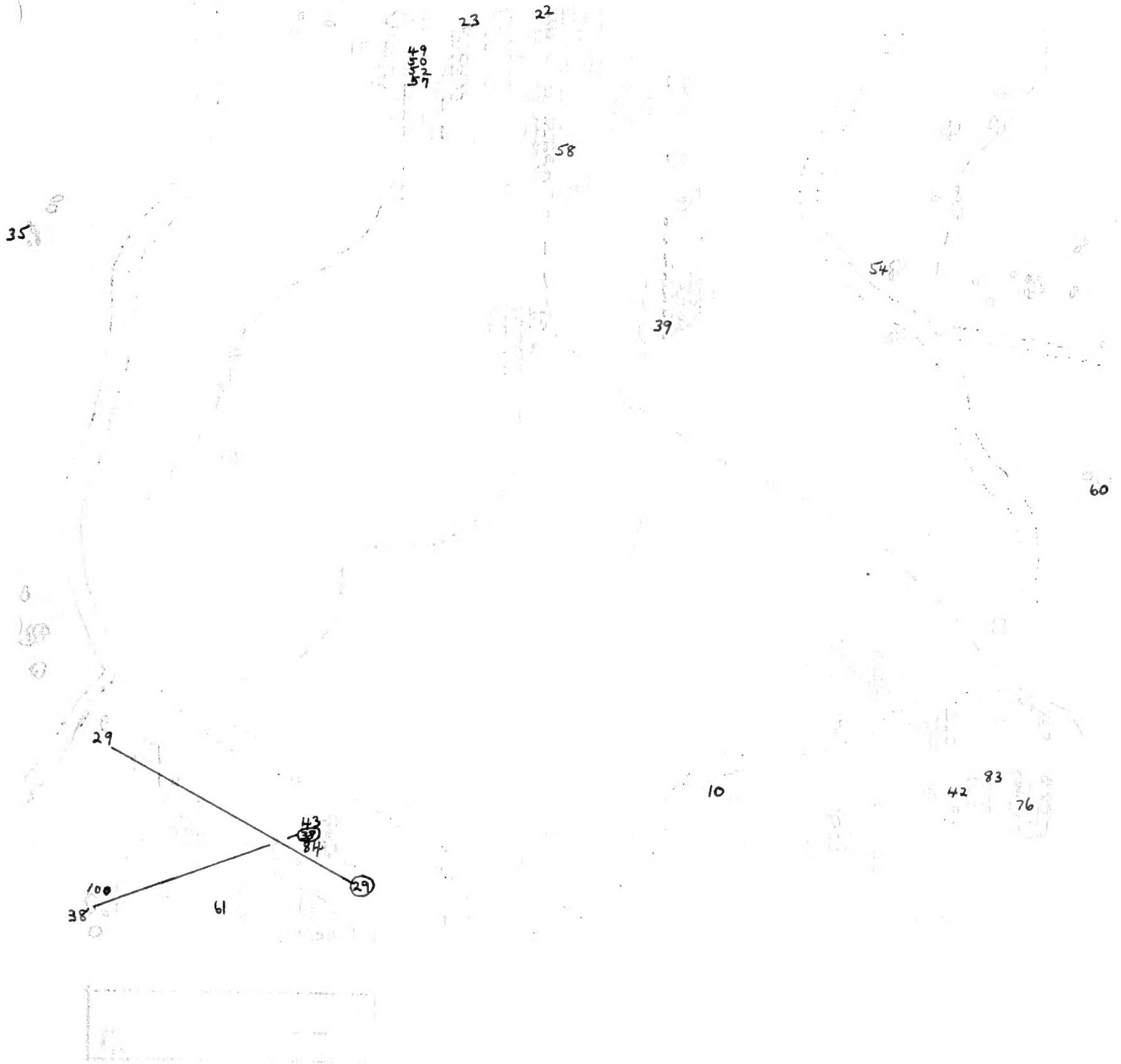


(29) = recapture site, 1961.

Digitized by the Internet Archive
in 2017 with funding from
CLIR

<https://archive.org/details/reptilecaptureda00mayh>

Capture Locations, 1958 (Sceloporus orcutti)



②⑨ = recapture site, 1961.

Phykosoma
micalli



I.R. - 13 8 1/2 x 11



Phrynosoma
m'calli

PHRYNOSOMA M'CALLI
(MARCH, 1961)

TIME	ON SURFACE	HEAD OUT	BENEATH SURFACE
0700			
0730			
0800			
0830			
0900			
0930			
1000			
1030			
1100			
1130			
1200			
1230			
1300			
1330			
1400			
1430			
1500			
1530			
1600			
1630			
1700			
1730			
1800			
1830			
1900			
1930			
2000			
2030			
2100			
2130			
2335			

PHRYNOSOMA M'CALLI
(FEBRUARY, 1961)

TIME	ON SURFACE	HEAD OUT	BENEATH SURFACE
0700			
0730			
0800			
0830			
0900			
0930			
1000			
1030			
1100			
1130			
1200			
1230			
1300			
1330			
1400			
1430			
1500			
1530			
1600			
1630			
1700			
1730			
1800			
1830			
1900			
1930			
2000			
2030			
2100			
2130			
2320			

PHRYNOSOMA M'CALLI
(JANUARY, 1961)

TIME	ON SURFACE	HEAD OUT	BENEATH SURFACE
0700			
0730			I
0800			I
0830		I	VI
0900		I	I
0930			
1000			
1030		I	
1100			
1130			
1200			
1230			
1300			
1330			
1400			
1430			
1500			
1530			
1600			I
1630			
1700			
1730			
1800			
1830			
1900			
1930			
2000			
2030			
2100			
2130			

PHRYNOSOMA M'CALLI
(DECEMBER, 1960)

TIME	ON SURFACE	HEAD OUT	BENEATH SURFACE
0700			
0730	 	 	
0800	 		
0830	 		
0900	 		
0930			
1000			
1030			
1100			
1130	 		
1200			
1230			
1300	 		
1330	 		
1400			
1430			
1500			
1530	 		
1600			
1630			
1700			
1730			
1800			
1830			
1900			
1930			
2000			
2030			
2100			
2130			

PHRYNOSOMA M'CALLI
(NOVEMBER, 1960)

TIME	ON SURFACE	HEAD OUT	BENEATH SURFACE
0700			
0730			
0800			
0830			
0900			
0930			
1000			
1030			
1100			
1130			
1200			
1230			
1300			
1330			
1400			
1430			
1500			
1530			
1600			
1630			
1700			
1730			
1800			
1830			
1900			
1930			
2000			
2030			
2100			
2130			

PHRYNOSOMA M'CALLI

(September, 1960)
(October, 1960)

Time	ON SURFACE	HEAD OUT	BENEATH SURFACE
0700			
0730			
0800			
0830			
0900			
0930			
1000			
1030			
1100			
1130			
1200			
1230			
1300			
1330			
1400			
1430			
1500			
1530			
1600			
1630			
1700			
1730			
1800			
1830			
1900			
1930			
2000			
2030			
2100			
2130			
2330			

Phrynosoma m'calli Laboratory Summary

Activity

1639 observations during 360 periods on 11 lizards (9 - Glamis; 2 P. Spgs.).

212 substrate temps. with Schultheis thermometer during same periods measured beside lizards.

With Brown Recorder

35 lizards measured (6 replications) during 14 days (34 - Glamis; 1 - [ad ♂] Palm Spgs.)

27 Adults (14 ♂; 13 ♀)

5 Immatures (1 ♂; 4 ♀)

3 Juveniles (1 ♂; 2 ♀)

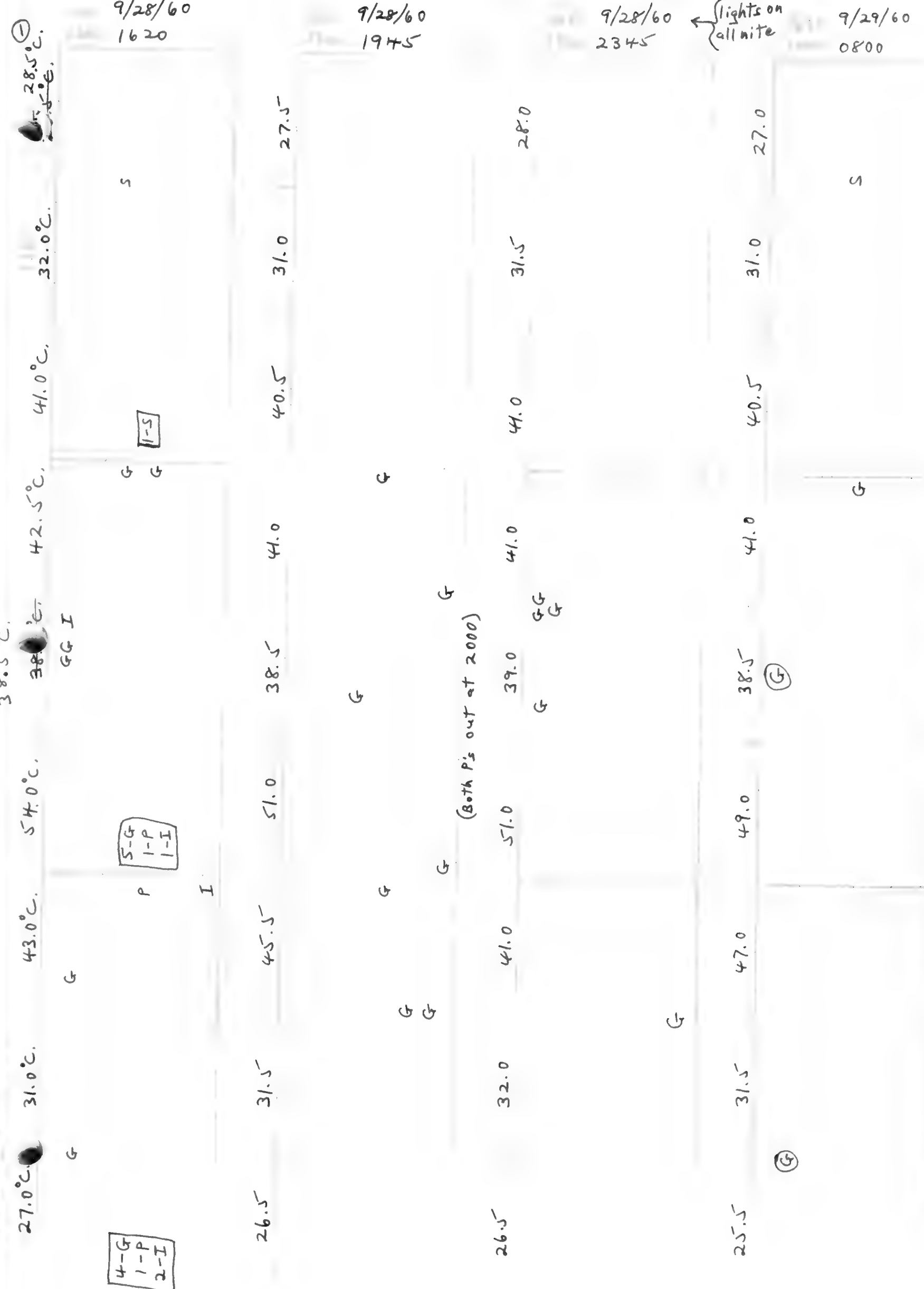
857 substrate temps.

858 cloacal temps.

Time Held Before Recording (weeks)

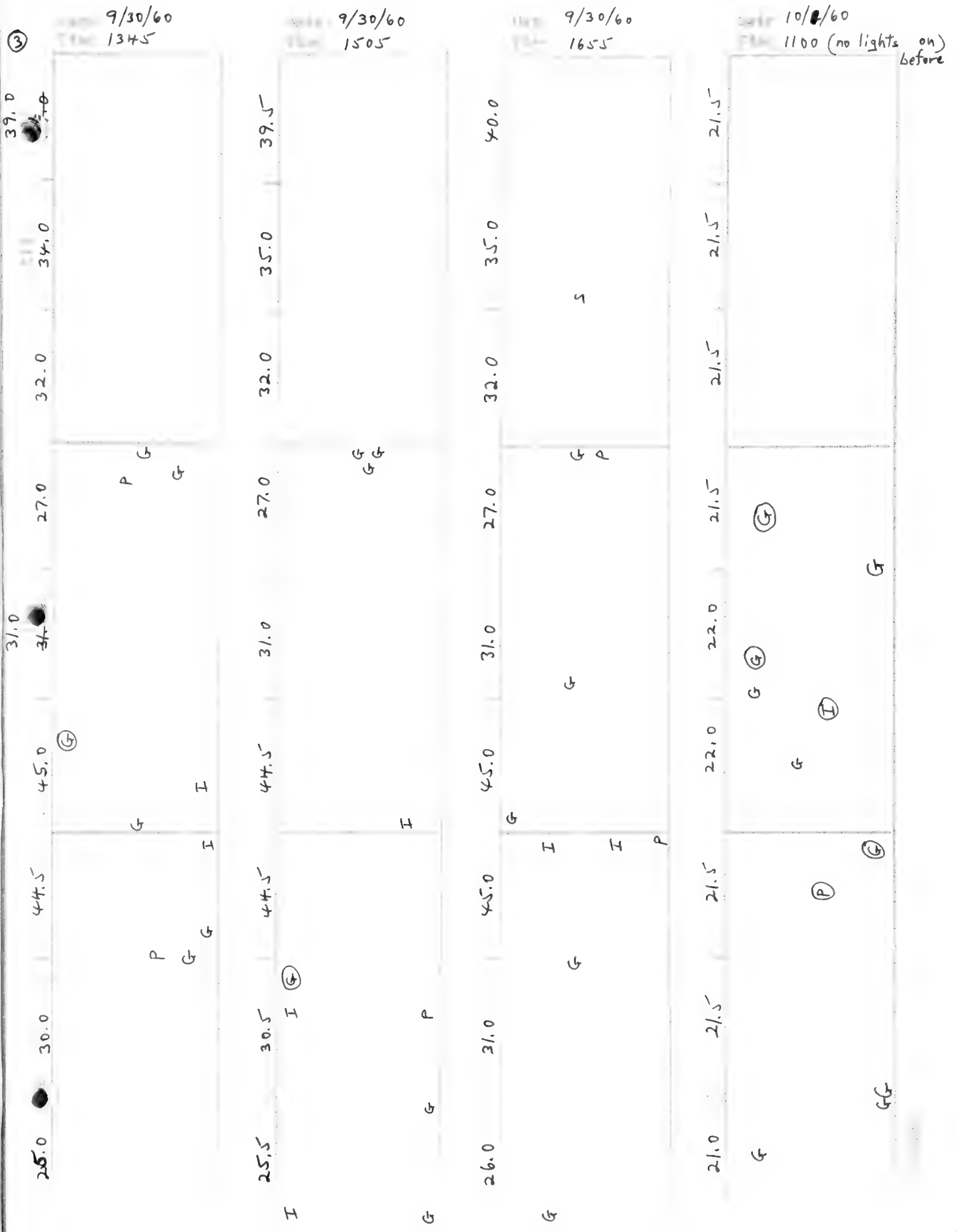
	<u>< 1</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>12</u>
Ad ♂	9		3		2	
Ad ♀	8		1	1	3	
Im ♂			1			
Im ♀	1			2		1
Juv ♂	1					
Juv ♀	1	1				

(P.S. ad ♂ held < 1 week)



I = Uta inornata
 S = Sceloporus occidentalis
 P = Phrynosoma m'calli (Palm Springs)
 G = Phrynosoma m'calli (Glamis)
 D = Diposaurus dorsalis
 G = Only head exposed
 G = Animal's position barely discernable (Began 1230, 10/5/60)

[illegible]



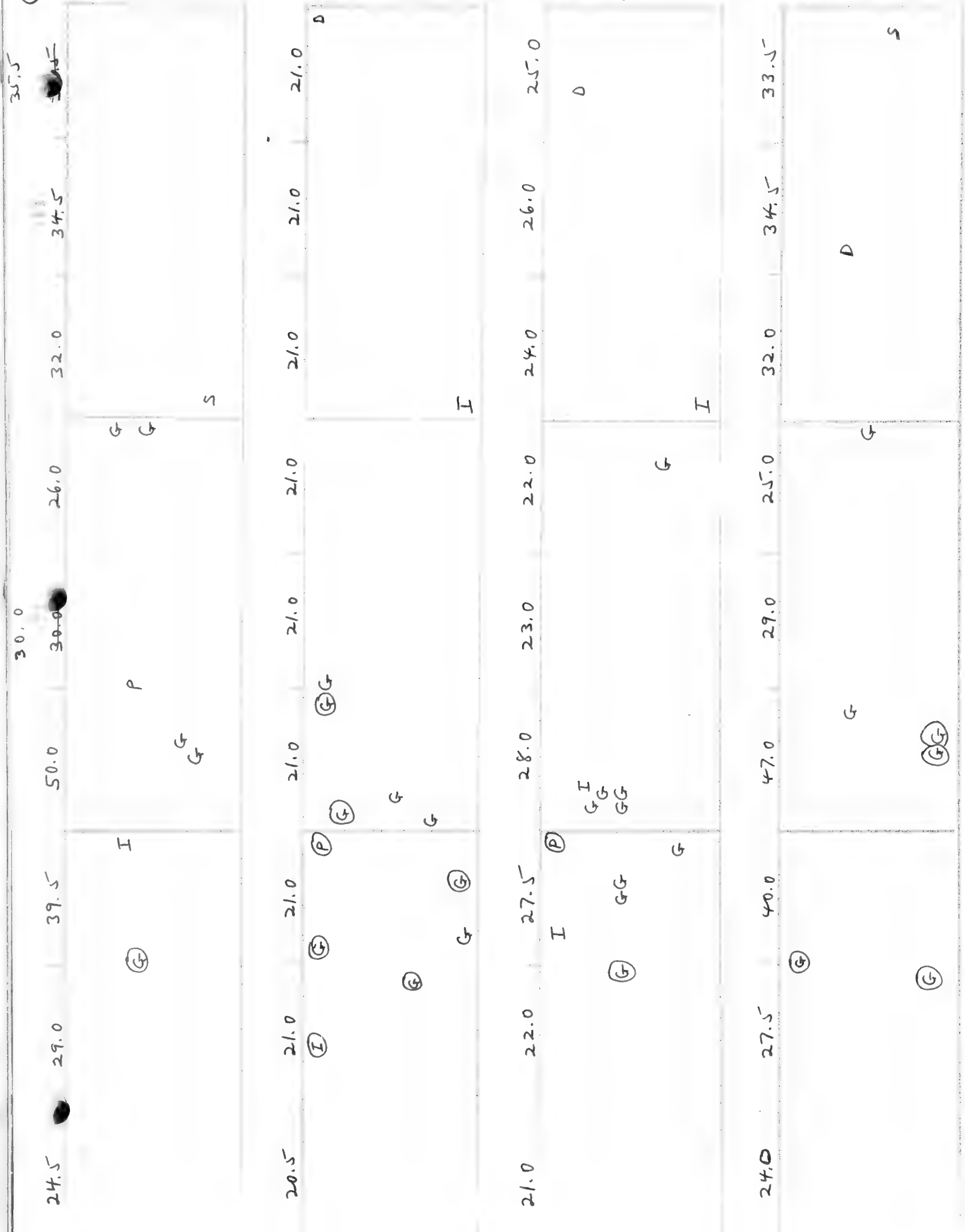
10/3/60
1655

10/4/60
0800

(lights on)
at 0810

10/4/60
0820

10/4/60
1130



Diposaurus changed from III to II at 1130.
6 Uma inornata added to III at 1300.

⑥

DATE 10/4/60
TIME 1700

10/5/60 (lights on)
0805 0813

	29.0	41.0	49.0	37.8	26.0
G					
P					
I			D	G	
(G)					
I					

No
Light

	24.5	28.0	42.0	49.0	31.0	26.0
I			I	D	G	
(G)				I		
I				G		
P						
G						

No Light

[illegible]

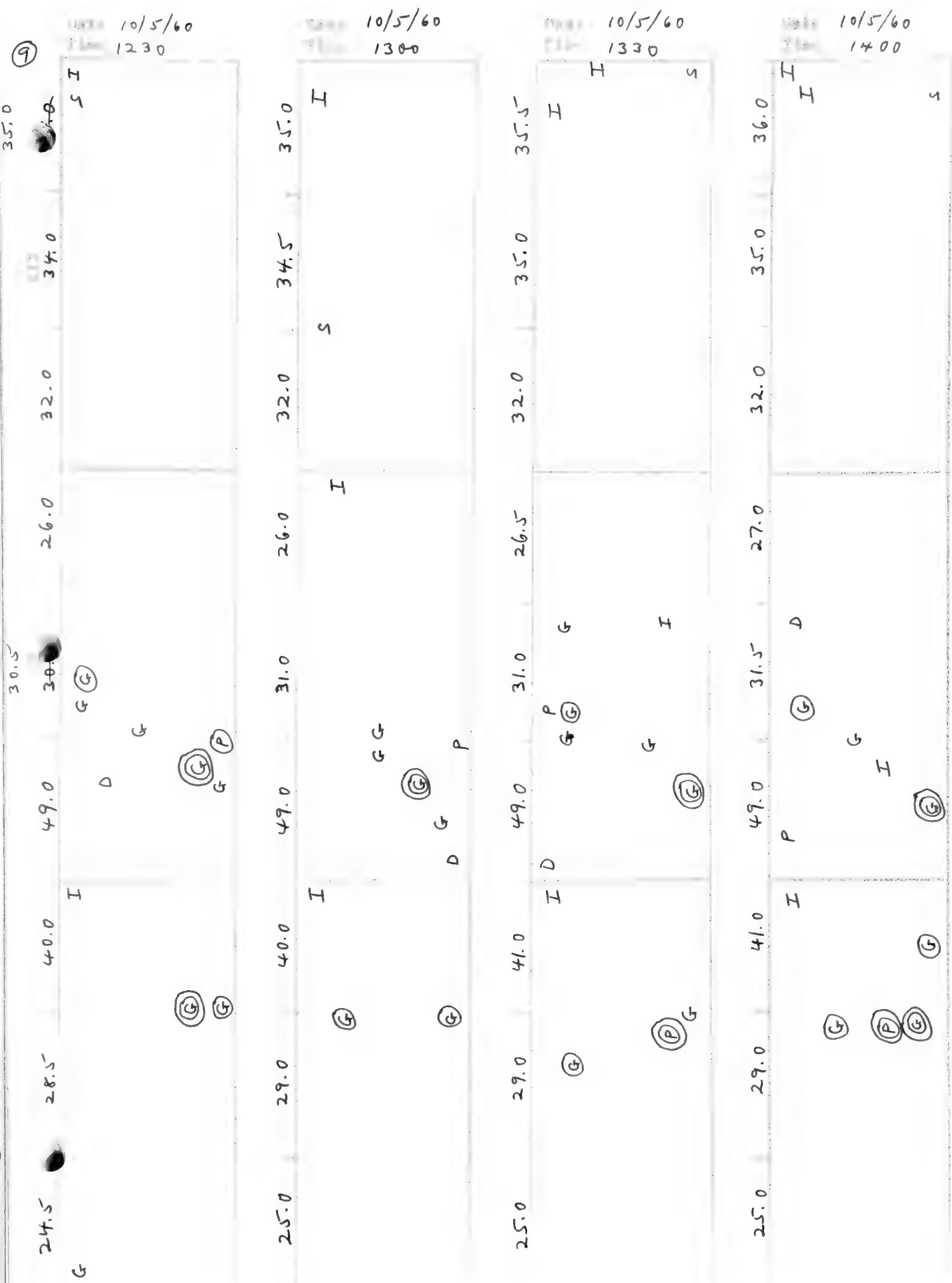
No
Light

[illegible]

Numbers near animal indicate time that animal emerged from sand. H.out = head out of sand.
out = entire animal out of sand.

out = entire animal out of sand.

24.0	27.5	39.0	47.0	29.5	25.5	30.5	33.0	33.5	10/5/60 1030
(G)	I	D	(I)		G		I		
(G)	G	G	(P)	(G)			S		
24.0	27.0	39.0	48.0	30.0	25.5	31.0	33.5	34.0	10/5/60 1100
(G)	I	D						I	
(G)	G	G	(G)		G				
24.5	28.0	40.0	48.5	30.0	26.0	31.0	34.0	34.0	10/5/60 1130
(G)	I	D					I		
(G)	G	G	(G)						
24.5	28.5	40.0	49.0	30.5	26.0	31.5	34.0	34.5	10/5/60 1200
(G)	I	D					I		
(P)	(G)	(G)	(P)	(G)				I	



Began recording @ 1230 today.

Date 10/5/60
Time 1430

[illegible]

10/5/60
1500

[illegible]

10/5/60
1530

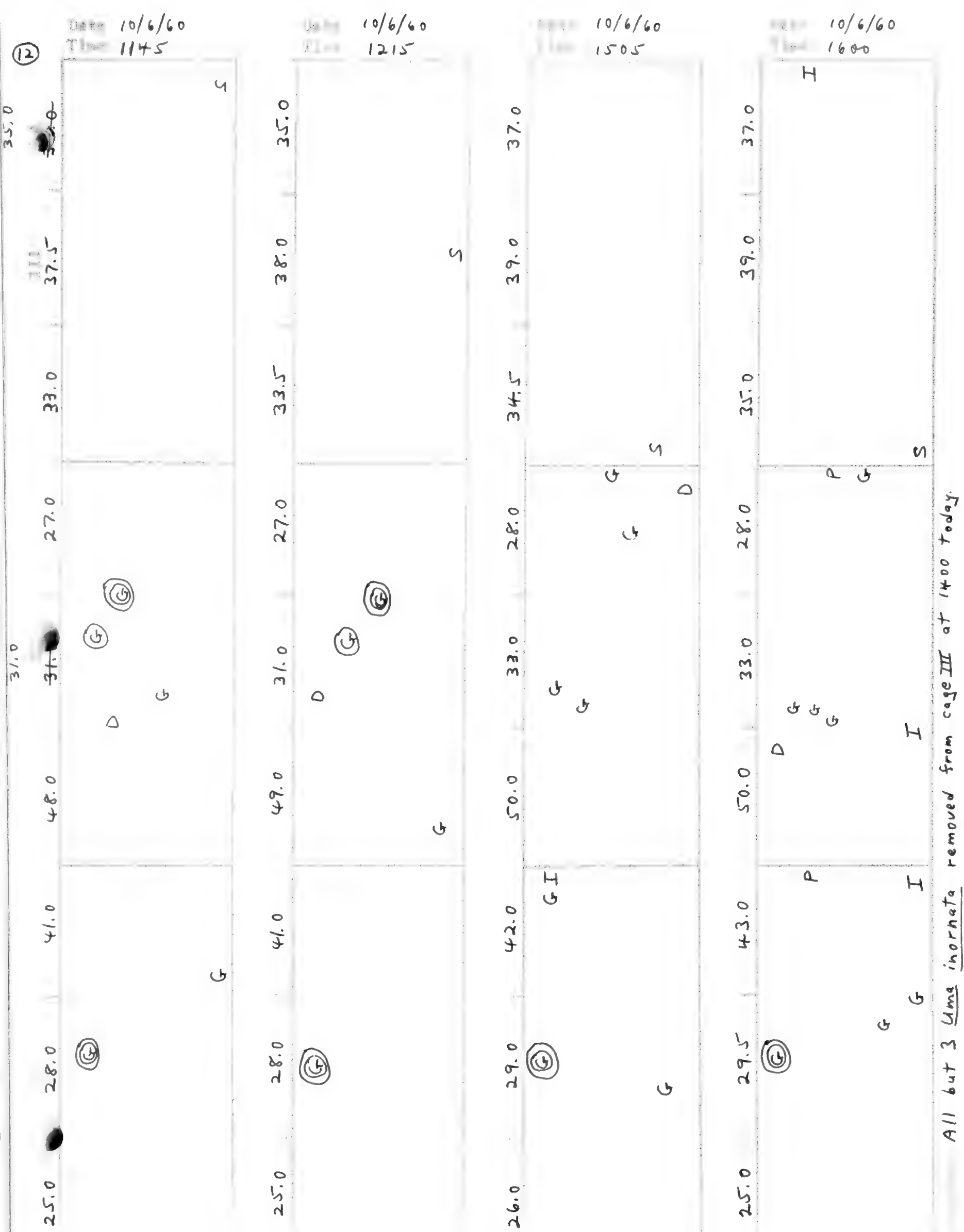
[illegible]

10/5/60
1600

	25.5	30.0	42.0	50.0	32.0	27.5	33.0	36.0	36.0	36.0
I			G	D	GG	I			I	(I) I
P		P			(P)		G			(I)
G			(G)	G						

All animals given sun bath — 0900 to 0920.

All animals given sun bath — 0900 to 0920.



All but 3 Uma inornata removed from cage III at 1400 today.

(13)

37.0

33.0

26.0

Date 10/6/60
Time 1700

Date 10/10/60
Time 0830

Date 10/10/60
Time 1200

Date 10/10/60
Time 1430

26.0	30.0	42.0	50.0	28.0	35.0	39.5	37.0
G		P	D	G		I	
G		I	G	I			I
		I					
		G					

(lights on at 0810 after 3 days of no lights)

19.5	20.5	29.5	28.0	22.0	20.5	23.0	25.0	25.0
G	(G)	I	D	G	G	I	I	I
		G						
		P	G					
	(G)							

23.0	26.0	40.5	45.0	28.0	24.0	29.5	33.5	33.0
			(G)	G				I
			G	G				S
			G					I
		(G)						
		I	D					
		G	G					

23.5	27.5	43.5	44.5	29.0	25.0	31.0	35.0	33.5
		I	(G)	G			(I)	I
		G						I
		I	D	G				
		P	(G)	P				
		G						
		G						

<div> <div>31.0</div> <div>18</div> <div>31.0</div> <div>30.0</div> <div>25.0</div> <div>29.0</div> <div>46.5</div> <div>47.5</div> <div>30.0</div> <div>27.5</div> <div>33.0</div> <div>40.5</div> <div>37.0</div> </div> <div> <div>10/13/60</div> <div>1255</div> <div>(all quiet)</div> <div>G</div> <div>D</div> <div>G</div> <div>G</div> <div>P</div> <div>G</div> <div>I</div> </div>	<div> <div>10/13/60</div> <div>1600</div> <div>25.5</div> <div>30.0</div> <div>46.5</div> <div>49.0</div> <div>32.0</div> <div>29.0</div> <div>34.5</div> <div>42.0</div> <div>32.0</div> </div> <div> <div>10/13/60</div> <div>1600</div> <div>(all quiet)</div> <div>G</div> <div>D</div> <div>G</div> <div>G</div> <div>P</div> <div>I</div> </div>	<div> <div>10/13/60</div> <div>1645</div> <div>25.5</div> <div>30.0</div> <div>46.5</div> <div>49.0</div> <div>32.0</div> <div>29.0</div> <div>34.5</div> <div>42.0</div> <div>32.0</div> </div> <div> <div>10/13/60</div> <div>1645</div> <div>(lights out at 1700)</div> <div>G</div> <div>D</div> <div>G</div> <div>G</div> <div>P</div> <div>I</div> </div>	<div> <div>10/13/60</div> <div>2130</div> <div>23.0</div> <div>23.0</div> <div>24.0</div> <div>25.0</div> <div>24.0</div> <div>23.0</div> <div>24.0</div> <div>24.0</div> </div> <div> <div>10/13/60</div> <div>2130</div> <div>G</div> <div>D</div> <div>G</div> </div>
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Time	22.5	23.0	23.5	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0	28.5	29.0	29.5	30.0	30.5	31.0	31.5	32.0	32.5	33.0	33.5	34.0	34.5	35.0	35.5	36.0	36.5	37.0	37.5	38.0	38.5	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.5	43.0	43.5	44.0	44.5	45.0	45.5	46.0	46.5	47.0	47.5	48.0	48.5	49.0	49.5	50.0	50.5	51.0	51.5	52.0	52.5	53.0	53.5	54.0	54.5	55.0	55.5	56.0	56.5	57.0	57.5	58.0	58.5	59.0	59.5	60.0																																																																																																																																																																																																																																																													
10/14/60	0820	0821	0822	0823	0824	0825	0826	0827	0828	0829	0830	0831	0832	0833	0834	0835	0836	0837	0838	0839	0840	0841	0842	0843	0844	0845	0846	0847	0848	0849	0850	0851	0852	0853	0854	0855	0856	0857	0858	0859	0900	0901	0902	0903	0904	0905	0906	0907	0908	0909	0910	0911	0912	0913	0914	0915	0916	0917	0918	0919	0920	0921	0922	0923	0924	0925	0926	0927	0928	0929	0930	0931	0932	0933	0934	0935	0936	0937	0938	0939	0940	0941	0942	0943	0944	0945	0946	0947	0948	0949	0950	0951	0952	0953	0954	0955	0956	0957	0958	0959	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348

Handwritten notes on lined paper:

Top section:

- ①
- ②
- ③
- ④
- ⑤
- ⑥
- ⑦
- ⑧
- ⑨
- ⑩
- ⑪
- ⑫
- ⑬
- ⑭
- ⑮
- ⑯
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Bottom section:

- ①
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[illegible]

H

(G) (G)

(G) (G)

G G

G

a

(G)

G

(G)

A hand-drawn diagram of a rectangular field. The field is divided into several sections by horizontal and vertical lines. In the top-left corner, there is a circle containing the letter 'H'. In the top-right corner, there is a circle containing a stylized 'G' or 'C' symbol. In the middle-left section, there is a circle containing a stylized 'G' or 'C' symbol. In the middle-right section, there are two circles, each containing a stylized 'G' or 'C' symbol. In the bottom-left section, there are two circles, each containing a stylized 'G' or 'C' symbol. In the bottom-right section, there is a circle containing a stylized 'G' or 'C' symbol. The diagram is drawn on a piece of paper with a vertical crease down the center.

[illegible]

11/14/60

0827

(lights on - 0830)

11/14/60

Time 0900

11/14/60

Time 1000

11/14/60

1120

Call quiet

all animals
above ground
are restless

Call Viet

10

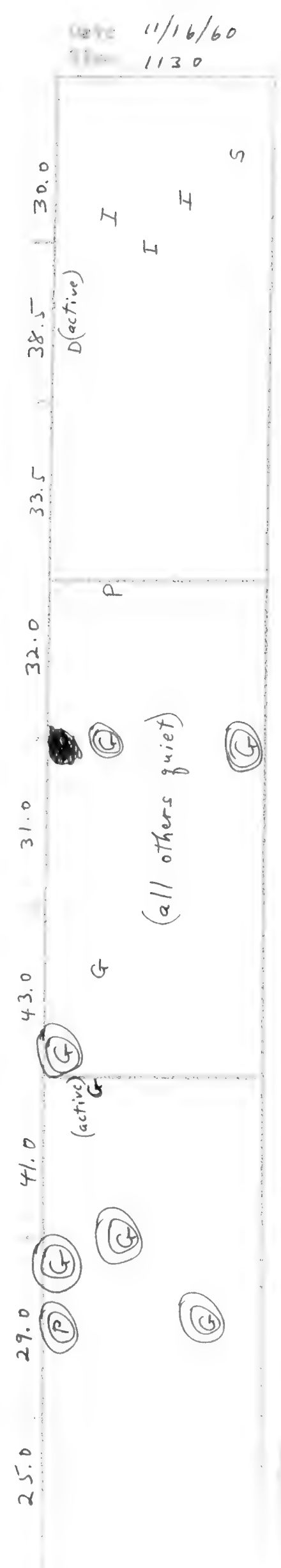
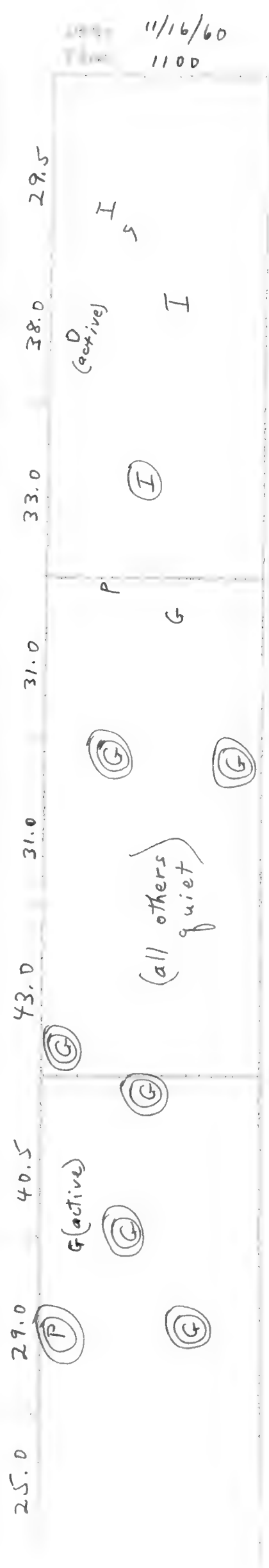
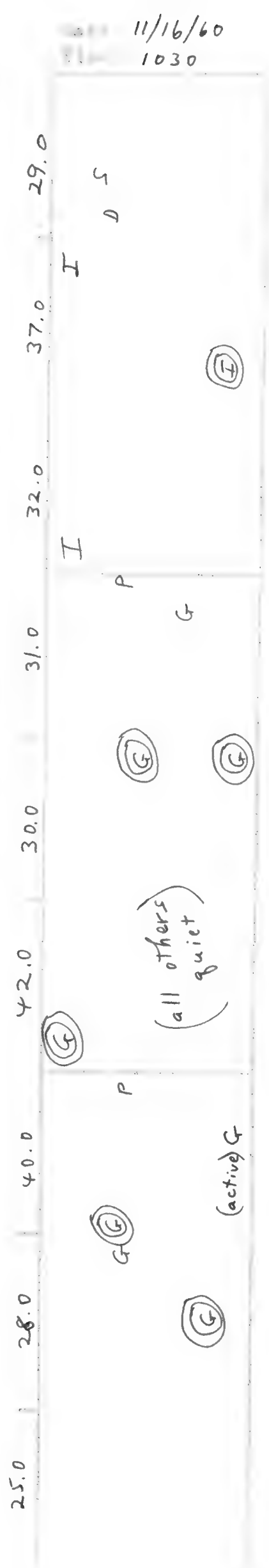
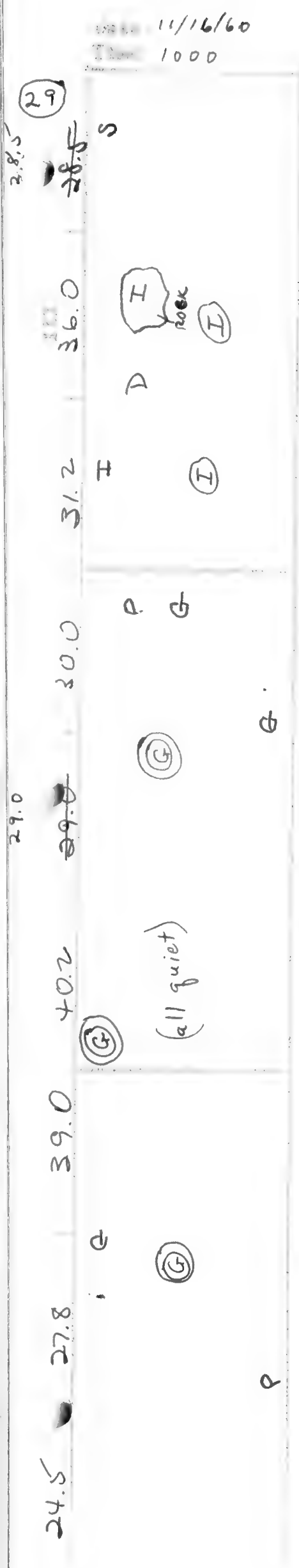
11/15/60
1645

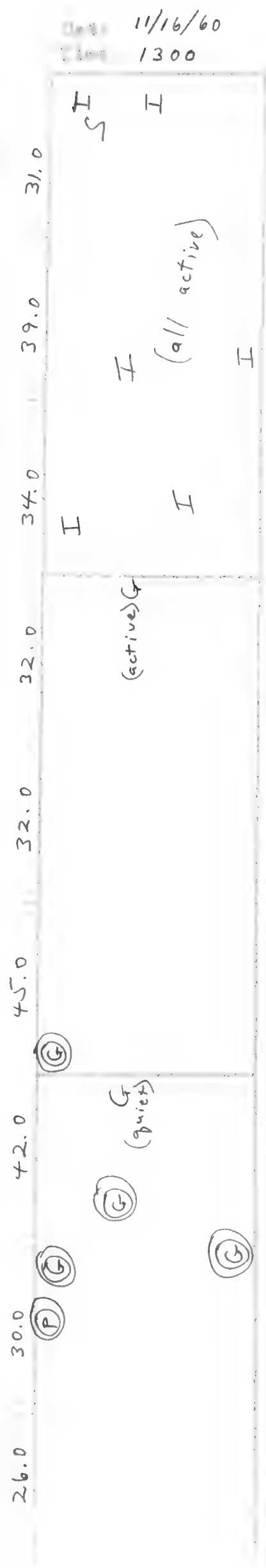
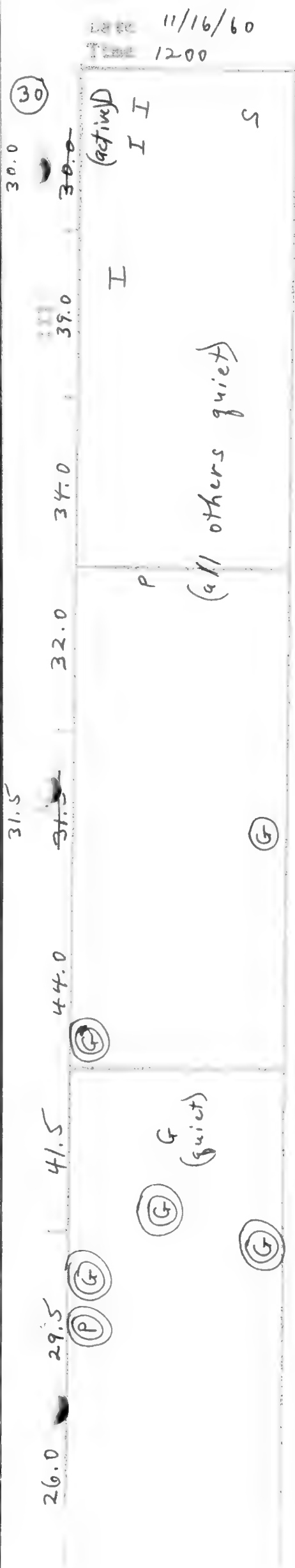
11/16/60
0930

[illegible]

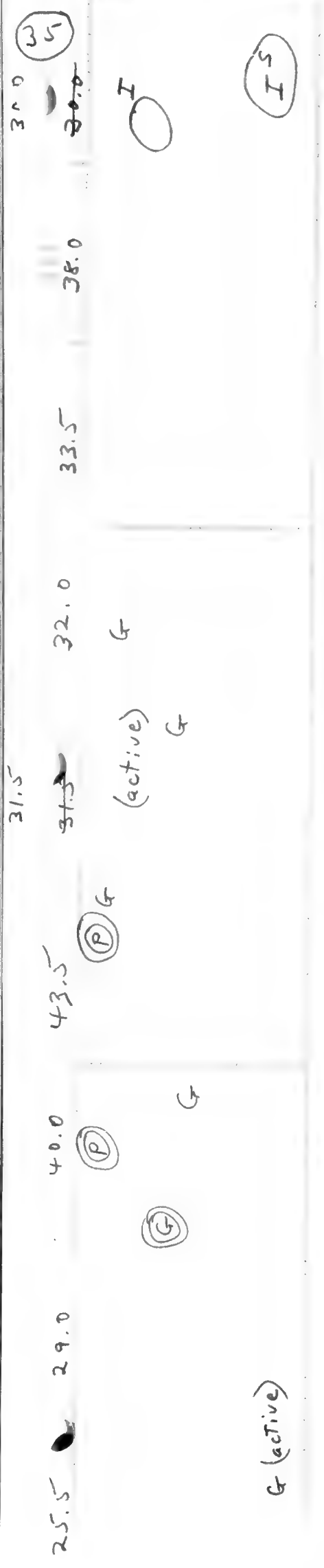
24.0 25.5 35.0

24.0	27.0	37.0
	G	G
	(G)	





11/18/60
1020



24.0 25.0 26.5 31.5 46.5 63.5

11/21/60

1120

Phrynosoma

m'calli
11/21/60

1700

24.5 25.0 26.5 30.0 41.5 70.0
All Phrynosoma m'calli (10) were placed in one large Terrarium 11/21/60 at 0900. Twelve thermometers are used simultaneously. Two heat lamps are set side by side at the right end of the cage. Upper half of the cage has white sand, lower half has brown sand. G = animals from Glamis area (8). P = animals from Palm Springs area (2).

25.0 26.0 28.0 33.5 50.5 68.0
G

G

G

G

G

G G

G G

G

G G G

G

25.5 26.0

28.0

33.0

47.0

72.0

G = animal on the surface.
G = animal with only head exposed.
G = animal's location can be determined, but almost none of animal is exposed.

27.0

28.0

29.5

35.5

53.0

70.0

3

11/22/60

1700

Phrynosoma m'calli

11/23/60

0845

G

G

G

27.0

28.0

29.5

35.0

49.0

88.0

23.0

23.5

23.0

23.0

23.4

23.8

G

G

G

G

P

G

G

G

G

P

23.0

23.5

23.0

23.5

24.0

23.5

Lights on at 0815.

24.0

24.5

25.0

28.0

37.0

39.0

4

11/23/60

0845

Phrynosoma m'calli

11/23/60

0905

24.5

25.0

26.0

28.0

35.0

63.5

G

24.0

24.0

25.0

26.5

31.5

53.5

24.0

25.0

26.5

30.0

41.0

42.5

G (both active)

(several active)

G P G

G

G P G

35.0

63.5

25.0 26.0 28.0 33.0 47.0 58.5 5

11/23/60

1000

Phrynosoma m'calli 11/28/60

0810 G

(P)

G (quiet)

25.5 26.0 27.5 31.0 41.5 76.5
 Lights off for previous 4 days. Lights on at 0810.

19.0

19.5 G

19.0

G

18.5

19.0

18.5 G

P

G

G

19.0

19.0

19.0

G

19.0

19.0

19.0

20.0

20.5

21.5

26.0

24.5

6

G

G

11/28/60

0825

Phrynosoma m'calli
11/28/60

1200

(some are
active)

P

G

G

G

P

36.0

21.5

20.0

20.0

19.5

19.5

24.0

22.5

26.0

31.0

42.0

63.0

G

G

G

G

P

P

G

G

G

G

23.0

25.0

29.5

42.0

79.0

23.0

24.5

26.5

32.0

48.5

65.5

7

11/28/60

1355

23.5

24.0

26.0

31.0

44.5

81.0

23.5

25.0

26.5

32.0

47.0

65.5

Phrynosoma m'calli

11/28/60

1715

24.0

24.5

26.0

31.5

40.5

76.0

Lights off at 1710.

22.5

23.0

23.5

25.0

29.0

36.0

08

G

G

G

P

G

11/28/60

1900

22.5

23.0

23.5

26.0

31.5

36.0

Lights off at 1710.

21.0

22.0

22.0

22.0

22.0

22.0

G

G

P

G
G

Phrynosoma m'calli

11/29/60

0830

G

P

22.0

21.5

Lights on at 0830.

22.0

22.0

22.0

22.0

G
G
G

22.0

23.0

23.0

24.0

29.5

27.5

9

11/29/60

0840

22.0

22.0

22.5

23.0

25.0

39.5

Lights on at 0830.

22.0

22.0

22.0

22.0

22.5

23.0

P

G

G

G

G

P

G

G

G

G

0800

22.0

22.0

22.0

22.5

23.0

23.0

All quiet.

Phrynosoma m'calli
11/30/60

10

11/30/60

0822

Phrynosoma m'calli;
11/30/60

1130

43.5

31.0

25.0

23.5

23.0

22.0

G

G

G

P

P

G

G

G

G

30.5

26.0

24.0

23.0

23.0

22.5

Lights on at 0808. All quiet.

65.0

50.0

34.0

29.0

27.0

26.0

G
G
G
G
G
P

G

G
G

82.0

44.5

32.5

28.0

26.5

26.0

All quiet.

26.0

27.0

29.0

34.0

49.5

70.0

11

11/30/60

1300

26.0

27.0

28.0

33.5

48.0

83.0

All quiet.

26.0

27.0

29.0

35.0

50.5

71.5

Phrynosoma m'calli

11/30/60

1550

26.0

27.0

28.5

34.5

49.0

84.5

All quiet.

1

2

3

4

5

6

12

12/1/60

0815

Phrynosoma m'calli;
12/1/60

0920

22.0

22.0

21.5

21.5

22.0

22.0

G

G

G P

G

G

G

22.0

22.0

22.0

22.0

22.0

22.0

34.0

31.0

25.0

23.5

23.0

22.0

G G

G

G

P

G

G

P

G

43.0

27.5

25.0

23.0

22.5

Lights on at 0910. Several are moving about.

G(active)

25.0

26.0

28.5

34.0

51.0

65.0

13

12/1/60

G

P P G

G

G

1110

G

G

G

25.0

25.5

27.0

33.0

44.0

74.0

All quiet.

23.5

24.0

24.0

23.5

24.0

24.0

G

G

G

G P

P

G

G

G

G

0808

23.5

24.0

23.5

24.0

24.0

24.0

Lights on at 0820. All quiet.

14

12/2/60

1135

Phrynosoma m'calli
12/5/60

0810

70.5

55.5

37.0

(G) P 36.0

31.0

(G)

31.4

(G) (G)

(P) 35.8

(G)

79.5

46.5

35.5

29.5

28.0

27.0

All quiet. (G) 28.6 = Soil Temp. recorded beside animal with Schultheis quick-registering thermometer.
(started now)

21.5

21.5

21.5

21.0

21.5

22.0

(G) (G)

G

(G)

P

(G)

(G)

(P) (G)

21.5

21.5

21.5

21.5

21.5

21.5

G 27.8

G 27.8

lights on at 0810 after 0100 21.5

15

12/5/60

0910

Phrynosoma m'calli

12/5/60

1250

54.0

44.0

(G) 41.4

30.0

P 32.8

(G) 37.5

31.2

X

G

26.0

(G) 26.0

24.0

(G) 24.0

23.0

G 23.0

23.0

23.0

20.0

21.0

31.0

59.0

2 animals moved (---X) while readings were being taken. Otherwise, all were quiet.

24.5

25.0

28.0

35.0

54.0

67.0

P (G) 31.5

(G) 35.0

(G) 36.8

G 24.5

(G) 24.8

24.0

26.0

33.0

47.0

75.0

(P) 35.0

All quiet.

16

12/6/60

0820

Phrynosoma m'calli
12/6/60

1155

21.0

21.5

21.0

21.0

21.0

21.0

P

G

G

G

G

120 WATER DISH

P

G

G

21.0

21.5

21.0

21.5

21.5

21.5

24.5

26.0

29.0

35.0

54.0

69.0

P 32.6

G 38.0

G 35.2
G

G 30.6

25.6 G

25.0

25.5

27.5

34.0

G 33.0

P

49.0

74.0

All quiet.

25.0

26.0

29.5

36.0

56.0

72.0

17

12/6/60

1515

Phrynosoma m'calli
12/7/60

0810

P G

G

P

G

G

G

25.5

26.0

28.5

36.0

51.0

76.5

#8 found dead at hot end of cage at 1650. Now there are 9 animals left.

22.0

22.0

22.0

22.0

22.0

22.0

P G G

G

G

G

G

G

22.0

22.0

22.0

22.0

22.0

22.0

All quiet. Lights will not be turned on again for a month or two.

18

12/7/60
GG

1330

Phrynosoma m'calli
12/7/60

1550

24.0

23.5

23.0

P G

23.0

23.0

23.0

G

G

G

P

G

23.0

All quiet.

23.0

G

23.0

23.0

23.0

23.0

23.5

24.0

25.0

24.0

23.5

23.0

P G

G

G

G

23.0

G

23.0

P

23.0

23.5

24.0

24.5

22.0

G

22.0

22.0

PG

G

22.0

22.0

22.0

19

G

12/8/60

G

0830

G

P

22.0

All quiet.

G

22.0

22.0

22.0

22.0

22.0

Phrynosoma

22.0

G

22.0

22.0

22.0

22.0

22.0

PG

G

m'calli

12/8/60

G

1350

P

22.0

All quiet.

G

22.0

22.0

G

22.0

22.0

22.0

22.0

22.0

22.0

22.0

22.0

20

G

G

P

G

G

12/15/60

G

0810

P

22.0

22.0

22.0

22.0

22.0

22.0

None of the animals have been really active since the lights were turned off 12/7/60. They shift positions occasionally, but that is all.

54.5

47.0

36.0

31.0

29.0

28.5



39.4

(Brown Sand)

Phrynosoma m'calli
1/17/61



37.8

(White Sand)

1455

59.0

51.5

37.0

32.5

30.5

29.5

U

U

4 animals left—all from Glamis. These animals have started to be somewhat active again. All of them eat now. New light arrangement completed today. White sand in lower area, brown sand in upper area.

32.0

7

5

29.0

26.0

24.0

23.0

23.0

21

1/18/61

12

4

0835

37.5

34.0

#4 has reddish horns & spots on top of head (♂)

#5 is largest (♂)

25.5

24.0

#7 has purple feet (♀)

#12 has creamy back (♀)

23.5

23.0

All active at 0830.

44.5

39.0

30.0

26.5

25.0

24.5

12 7 (C)
36.8

(C)
33.0

51.0

42.5

31.0

27.0

26.0

25.0

0945

Phrynosoma m'calli
1/18/61

34.0

31.0

5 (active) (4)
35.6

7

31.2

28.0

27.0

25.5

25.0

22

1/23/61

0835

12 35.0

40.0

36.0

28.0

26.5

26.0

25.5

54.0

44.0

34.0

30.0

28.0

28.0

Phrynosoma m'calli
1/23/61

1305

58.5

48.5

35.5

31.5

30.0

28.5

51.0

39.0

32.0

30.0

28.0

27.0

23

1/24/61

1130

12
35.0

54.0

44.5

33.0

30.0

29.0

28.0

All were active when lights were turned on at 0830.

55.0

43.0

33.0

30.5

28.5

28.0

7 12.5
4
37.2

Phrynosoma m'calli
1/24/61

1700

58.0

47.0

35.0

32.0

30.0

29.0

23.0

23.0

23.0

23.0

23.0

23.0

24

12

ⓐ

7

1/26/61

0810

23.0

23.0

23.0

All quiet. Lights on at 0810.

44.5

ⓐ

35.5

35.0

ⓐ

34.8

30.5

ⓐ

31.5

23.0

23.0

23.0

28.0

26.5

26.0

Phrynosoma m'calli

1/26/61

1015

49.5

41.5

31.0

29.0

27.0

26.0

All were active for about an hour after lights were turned on. Only #12 active now.

23.5
4

23.5

23.5

23.5

23.5

23.5

25

5

1/27/61

0800

1

12

23.5

23.5

23.5

23.5

23.5

23.5

None active when lights turned on at 0800.

49.5

38.0

31.0

29.0

28.0

27.0

35.0

G

36.2

G

33.8

12

G

34.4

52.5

44.5

32.0

30.0

28.0

27.0

None active.

Phrynosoma m'calli
1/27/61

1115

35.0

28.0

⁷
⁴
31.2
(quiet)

26.0

25.0

24.5

24.0

26

1/31/61

¹²
25.0
(active)

⁵
30.0
(active)

0835

37.0

33.0

26.0

25.0

24.5

24.0

Lights on at 0800.

42.5

34.0

⁵
⁴
¹²
34.0 32.2

29.0

⁷
27.8

27.0

26.0

25.5

Phrynosoma m'calli
1/31/61

0915

45.5

38.5

29.0

27.0

26.0

25.5

54.0

41.0

37.0
G
G

32.0

32.6
7

4
36.8

29.0

27.0

26.5

27

1/31/61

1330

56.5

46.0

33.0

30.0

28.5

27.0

54.5

42.0

37.0
5

36.2
12

32.0

29.0

27.5

26.5

37.0
7 — emerged at 1655

Phrynosoma m'calli
1/31/61

1645

35.8
4

57.0

47.0

34.0

30.5

29.0

27.5

3 of them are active, 4th one emerged + became active. #5 displayed for #12.

28

2/1/61

0840

Phrynosoma m'calli
2/1/61

1045

34.0

29.0

26.0

25.0

24.5

24.0

$\frac{33.0}{124}$ 5

37.0

33.0

26.0

25.0

24.5

24.0

Lights on at 0800. 3 are active.

51.0

39.0

32.0

29.5

28.5

28.0

$\frac{38.6}{12}$ 34.0

$\frac{33.6}{12}$ 33.6

$\frac{26.8}{17}$

$\frac{31.8}{7}$

54.0

45.0

33.0

30.0

29.0

28.0

None active.

29

2/1/61

1545

Phrynosoma m'calli
2/1/61

1645

28.0

28.5

30.0

33.5

42.5

55.0

34.2

35.0

37.2

41.0

29.0

30.0

32.0

35.0

48.0

58.0

3 are active.

28.0

28.5

30.0

33.5

43.0

55.5

36.0

39.0

29.0

30.0

32.0

35.0

48.0

58.0

3 are slightly active. #5 vibrated and crawled over #4.

40.0

31.0

27.0

25.5

24.0

23.5

30

2/22/61

0940

44.0

38.0

Lights on at 0805.

#/added to cage 2/3/61. All are active at some time of day.

49.0

36.0

$\frac{36.0}{7}$

$\frac{32.6}{12.5}$

29.0

27.0

25.0

25.0

$\frac{32.8}{4}$ (active)

28.0

27.0

25.0

24.0

Phrynosoma m'calli
2/22/61

1110

52.0

42.5

30.0

28.0

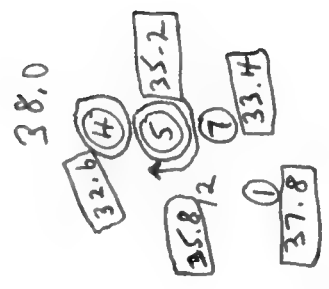
26.5

25.0

All quiet.



52.0



30.5

27.5

26.0

25.5

31

2/22/61

1210

54.0
All quiet.

54.0

45.0

31.0

29.0

28.0

26.5

Phrynosoma m'calli
2/22/61

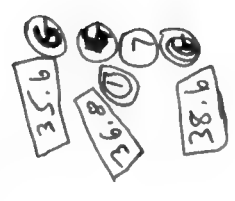
39.0

31.5

28.5

27.0

27.0



1350

56.0

47.0

33.0

30.0

28.5

27.5

32

2/22/61

1515

Phrynosoma

m'calli;
2/22/61

1605

54.5

40.0

32.0

29.0

27.5

27.0

5 (active)
41.5
(sat here ~ 2 min)

37.1
33.0

G
G
G
G

57.0

47.5

34.0

30.5

29.0

28.0

55.0

40.5

32.0

29.0

27.5

27.5

4 (active)
45.0

37.0
(active)

33.2

G
G
G
G

57.0

48.0

34.0

31.0

29.0

28.0

55.5

40.0

$\frac{4}{37.4}$

$\frac{7}{32.0}$

12

32.0

30.0

28.0

28.0

33

2/22/61

1705

57.0

48.0

34.0

31.0

29.5

28.5

22.0

22.0

22.0

21.0

21.0

21.0

Phrynosoma

m'calli
2/24/61

0855

4

1

22.0

22.0

21.0

21.0

21.0

Lights on at 0855.

32.5

28.0

25.5

25.0

23.0

22.0

34

2/24/61

1000

12

4 ← (active) → 5

36.0

32.0

28.0

27.5

23.5

22.0

56.0

40.5

①

38.8

5

35.8

31.5

29.0

27.0

27.0

Phrynosoma

m'calli;
2/25/61

57.5

48.0

34.0

30.0

28.0

27.5

39.2
12

35.8
4

27.6
7

1545

All quiet. #7 seems to be getting weaker and weaker. It hasn't acted just right since its hind legs and tail were burned by the UV lamp. #4 & 5 became active while I was taking these readings.

56.0
1 (active)

41.0

32.0

29.0

27.0

27.0

35-

5 (active)

2/25/61

4 (active)

1620

7

12 (active)

58.0

48.0

34.0

30.5

28.0

28.0

#5 vibrated rapidly beside #1, who simply buried in the sand. #5 ignored #1 after that. All but #7 are moving about the cage.

21.0

21.0

21.0

21.0

21.0

21.0

(G)

(G)

Phrynosoma

m'calli

2/27/61

0810

(G)

(1)

21.0

21.0

21.0

21.0

21.0

21.0

#7 found dead this morning.
Lights on at 0810.

36

2/27/61

0835

Phrynosoma m'calli
2/27/61

1200

21.0

21.0

22.0

23.0

26.0

31.0

5
30.4

1
32.2

12
31.0

4
32.6

29.0

34.5

24.0

22.0

21.0

21.0

57.0

37.0

28.5

25.5

24.0

23.0

5
35.4

1
37.2
12

4
33.6

53.0

43.5

30.0

26.5

24.5

24.0

All quiet.

54.0

39.0

30.0

26.5

25.0

24.0

37

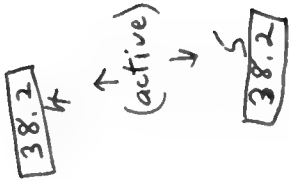
2/27/61

1645

Phrynosoma m'calli

2/27/61

2045



56.0

46.0

31.5

27.5

#5 vibrated rapidly in front of #4, then walked across the back of #4.
#1 emerged and became active at 1650, #12 became active at 1655.

26.0

25.0

24.0

23.5

23.0

23.0

24.5

25.5

26.0

25.0

24.0

23.5

23.0

23.0

Overhead lights on at 1935.

Heat lamps on at 2045.

42.0

125
34.2

33.0

27.0

25.0

24.0

23.0

38

2/27/61

4
36.2

2/25

44.0

36.0

28.0

25.0

24.0

23.5

3 were active.

28.0

26.0

24.5

24.0

23.0

23.0

26.0

(active)

Phrynosoma m'calli
2/27/61

2320

28.0

27.0

24.5

24.0

23.5

23.0

Heat lamps off at 2135. #1 ate a mealworm at 2320.

39

2/28/61

0810

Phrynosoma m'calli
2/28/61

0905

22.0

22.0

22.0

22.0

22.0

22.0



①

22.0

22.0

22.0

22.0

22.0

22.0

Lights on at 0812.

39.0

4
34.4

30.0

26.0

24.5

23.0

23.0

5
36.0

12
34.4
①

39.0

33.0

26.5

26.0

24.0

23.0

#4 + 5 were quite active, #12 moved about some.

51.0

36.5

34.6

5

6

28.5

26.0

24.5

24.0

70

2/28/61

1110

52.0

All quiet.

42.5

37.4

1

33.0

12

29.5

27.0

25.0

24.0

Phrynosoma m'calli

2/28/61

51.0

36.5

34.6

5

6

28.5

26.0

24.5

24.0

1120

52.0

42.5

37.4

1

33.0

12

29.5

27.0

25.0

24.0

37.0 31.0 29.0 30.0 38.0 44.5 71
 2/28/61

1335
 32.0 31.5 27.5 29.0 34.0 44.0
 Cage reversed at 1330 so that brown sand* nearest the door and white sand* nearest file cabinets.
 47.0 35.0 30.0 29.0 32.0 36.0
 12
 37.8

Phrynosoma m'calli
 2/28/61

1415
 40.0 36.5 29.0 28.5 31.0 36.0
 All quiet.
 12
 33.8
 29.0 1

28.0

(active)

$\frac{37.6}{5}$

24.0

23.5

22.5

22.0

22.0

42

3/1/61

0808

4 (active)

$\frac{34.0}{4}$

$\frac{26.2}{12}$ (active)

$\frac{26.0}{1}$ (active)

26.0

25.0

22.0

22.0

22.0

22.0

Lights on at 0800. All but #1 were completely hidden when the lights were turned on 8 min. ago.

52.0

37.0

29.0

26.0

24.5

24.0

G

$\frac{36.0}{1}$

G

G
 $\frac{32.0}{1}$

45.5

All quiet.

39.5

29.0

26.0

25.0

24.5

Phrynosoma m'calli
3/1/61

1105

55.0



30.0

27.0

25.0

24.5

43

3/1/61

1330

48.0

42.0

30.0

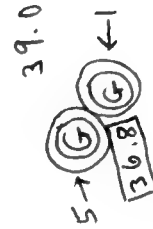
27.0

26.0

25.0

All quiet. #12 standing with belly off the ground and eyes closed.

55.0



39.0

30.0

27.0

25.0

24.5

Phrynosoma m'calli

3/1/61

1400

48.0

42.0

30.0

27.0

25.0

25.0



All

55.5

39.0

⑤
37.0

30.0

27.0

25.0

24.5

44

3/1/61

1430

49.0

42.0

26.0
⑫

31.4
1 (active)

30.5

27.5

26.0

25.5

#1 is leaning on its right elbow on the sand, then it moves about the cage.
No change at 1500.

56.0

40.0

5 (active)
38.0

31.0

27.5

25.5

25.0

Phrynosoma m'calli

3/1/61

emerged at 1538

4
39.6
①
34.4
⑫

49.0

43.0

31.0

27.5

26.0

25.5

1530

45

3/1/61

1610

Phrynosoma m'calli
3/1/61

1700

57.0

40.0

31.0

27.5

26.0

25.0

39.0
5

40.2
4

35.8
12 emerged at 1615.

50.0

43.0

31.0

28.0

27.0

26.0

All active at 1620.

57.0

40.0

31.0

27.5

26.0

25.0

39.0
12

36.0
1

30.8
3 (active)

38.0
4

50.0

43.0

31.0

28.0

27.0

26.0

76

3/1/61

2010

Phrynosoma m'calli
3/1/61

2335

55.0

38.5

(G)

34.0 12 (active)

29.0

26.0

24.0

23.0

(G)

34.0 1 (active)

48.0

41.5

29.5

26.0

24.5

24.0

Heat lamps have been on since 0800, overhead lights have been off since 1700.

55.0

39.0

29.0

26.0

24.0

23.0

5 (38.0)

(4) 35.8

(12) 23.8

48.0

41.5

29.5

26.0

24.5

24.0

Overhead lights turned on again at 2015.
All quiet at 2335.

22.0

⑤

22.0

22.0

22.0

22.0

22.0

47

3/2/61

④

⑬

0800

22.0

22.0

22.0

22.0

22.0

22.0

All lights out at 2345 on 3/1/61. Lights on at 0805.

26.0

24.5

25.5

25.0

24.0

22.5

⑤ emerged 0825.
(active)

1 (active)

①

Phrynosoma m'calli
3/2/61

0820

⑬
22.5

4 (active)
25.6

25.5

25.0

25.0

26.0

24.0

22.5

43.0

32.0

28.0

26.0

24.5

23.5

48

$\frac{4}{32.6}$

$\frac{12}{31.0}$

$\frac{1}{29.2}$

$\frac{5}{36.8}$

3/2/61

0915

38.0

All basking.

34.0

27.0

26.0

25.0

24.0

50.0

$\frac{31.0}{(active)/2}$
 $\frac{1}{33.0}$

29.0

26.0

25.0

24.0

Phrynosoma m'calli
3/2/61

1020

44.0

38.5

28.5

26.5

25.5

24.5

PHRYNOSOMA M'CALLI
 (TEMPERATURE TAKEN OF SOIL BESIDE LIZARD WITH
 SCHULTHEIS QUICK-REGISTERING THERMOMETER
 11/2/20

°C TEMP	ON SURFACE	HEAD OUT	BENEATH SURFACE
18			
19			
20			
21			
22		I	
23	III	II	
24	I	I	I
25	I		I
26	III	I	II
27			I
28	III		I
29	I	I	I
30	II	III	II
31	III III		III
32	III	III	II
33	III III	II	III
34	III II	II	III II
35	III	II	III III
36	III	III	III
37	III III	III	III III
38	III	III	II
39	III		III
40	II	I	
41	II		
42			
43			
44			
45			
46	I		
47			

PHRYNOSOMA M'CALLI

(72-112 - 11)

°C TEMP	ON SURFACE	HEAD OUT	BENEATH SURFACE
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			

Uma spp.

Uma spp.

No. of Animals in Terrarium

	Date	No.	Date	No.	Date	No.	Date	No.	Date	No.
U. notata	3/1/61	16	3/23/61	15	3/31/61	14	4/6/61	14	4/10/61	10
U. inornata	"	16	"	16	"	16	"	15	"	18
U. scoparia	"	10	"	9	"	9	"	9	"	21
Total	"	42	"	40	"	39	"	38	"	49

U. notata	4/20/61	20
U. inornata	"	18
U. scoparia	"	21
Total	"	59

Number of *Uma* Above Ground in Terrarium

1.

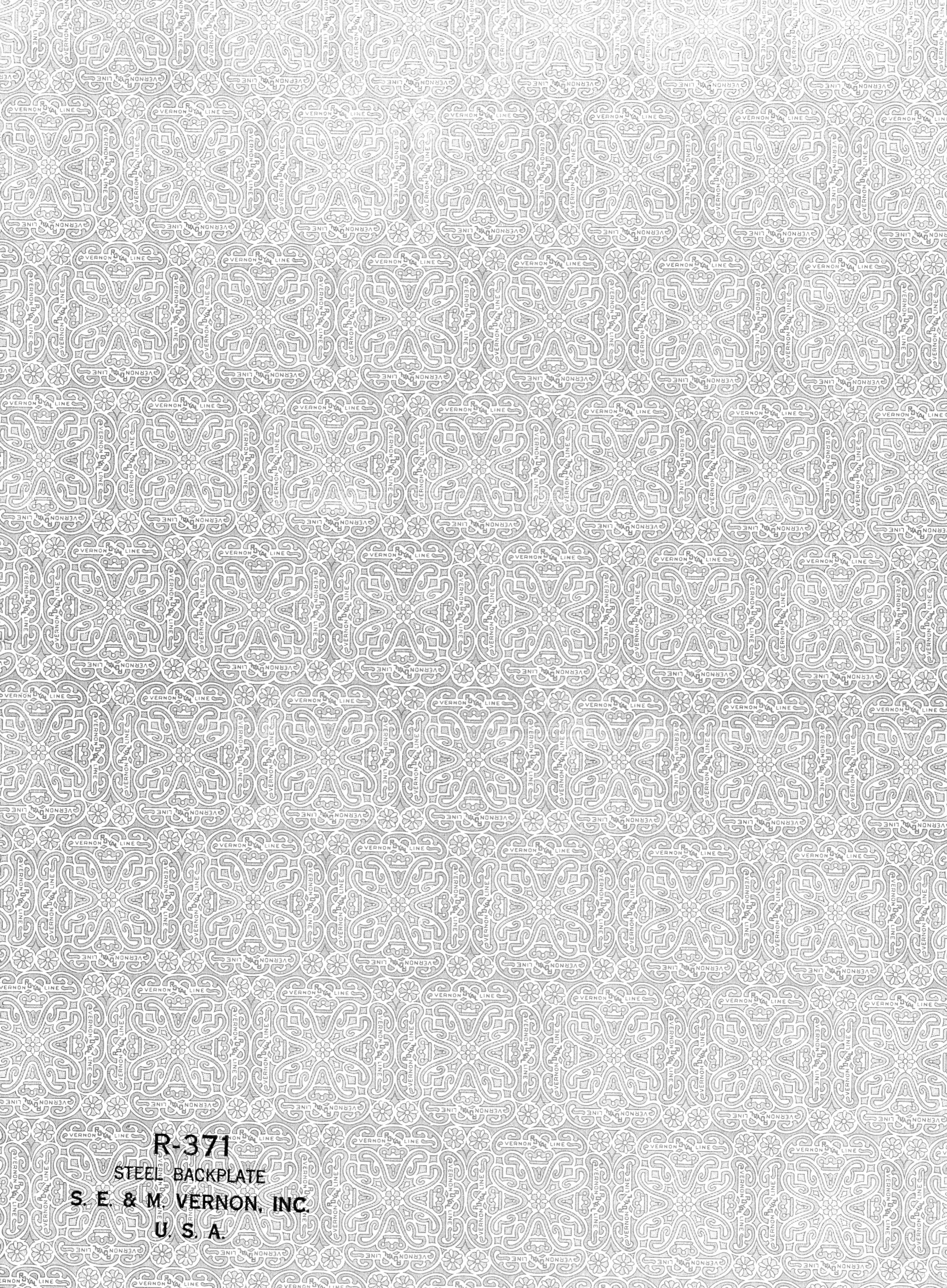
Date	Time	TEMP.(°C.)		NUMBER				No. Heads	Remarks
		Min.	Max.	notata	inornata	scoparia	Total		
3/1/61	1115	32.0	47.0	2	4	1	7		
"	1200	32.5	47.0	1	3	1	5		
"	1330	33.0	48.0	1	3	1	5		
"	1400	33.5	49.0	6	4	1	11		
"	1430	34.0	49.0	5	6	4	15		
"	1500	34.0	49.0	5	8	3	16		
"	1530	34.0	49.0	8	8	4	20		
"	1610	34.0	49.0	5	6	4	15		
"	1630	34.0	49.0	6	4	4	14		
"	2010	30.5	43.5	2	2	1	5		Lights on since 0800; overheads off at 1700
"	2335	30.0	43.5	2	1	1	4		
3/2/61	0800	22.0	22.0	4	3	2	9	17	
"	0820	24.0	29.0	11	10	9	30		Lights on - 0805
"	1015	31.0	45.0	11	7	5	23		
3/6/61	0815	22.0	22.0	0	2	0	2	9	Lights on - 0820
"	0930	29.0	40.0	6	9	5	20		
3/9/61	1325	32.5	48.0	1	5	2	8	1	
3/10/61	0800	22.0	22.0	4	4	1	9	7	
"	0813	23.0	28.0	9	10	8	27		Lights on - 0805
"	0825	24.5	31.0	12	13	9	34		Just feed
"	1155	33.5	48.0	1	1	1	3	5	
"	1640	33.5	49.0	7	5	2	14		
3/14/61	1235	32.5	47.0	0	2	1	3		
3/15/61	1300	34.0	48.5	3	0	1	4	1	
3/23/61	0815	22.0	22.0	4	0	1	5	19	
"	0820	22.5	23.5	10	8	4	22	2	Lights on - 0815
"	0900	29.0	33.0	8	9	6	23	3	Fed - 0910
"	0930	30.0	37.5	7	7	5	19	1	
"	1000	31.5	41.0	4	7	3	14	1	
"	1130	34.0	45.0	4	1	2	7	2	

Date	Time	TEMP. (°C)		NUMBER			Total	No. Heads	Remarks
		Min.	Max.	notata	inorneta	scoparia			
3/23/61	1200	24.0	41.0	4	2	1	7	0	
"	1230	25.0	41.5	3	1	2	6	0	
"	1425	28.0	48.0	5	4	1	9	2	
3/24/61	0835	21.0	28.0	15	11	7	33	0	Lights on - 0830.
"	1410	31.5	47.5	6	5	7	18	0	
3/30/61	0800	22.0	22.0	6	3	4	13	7	Lights on - 0800.
"	0830	22.5	23.5	14	7	7	28	3	Fed at 0815.
"	0920	31.0	38.0	8	7	4	19	1	
"	1005	33.0	42.5	4	4	2	10	1	
"	1100	34.0	45.0	3	4	2	9	2	
"	1130	34.0	45.5	3	3	2	8	2	
"	1200	34.0	46.0	3	2	0	5	1	
"	1230	34.0	46.5	3	2	0	5	2	
"	1300	34.0	46.5	3	3	0	6	0	
"	1330	34.0	47.0	3	4	1	8	0	
"	1400	34.5	47.0	3	4	1	8	1	
"	1430	34.5	47.0	4	6	2	12	1	
"	1500	35.0	47.0	7	8	5	20	0	
"	1530	35.0	47.0	7	9	3	19	1	
"	1400	35.0	47.0	7	6	4	17	0	
"	1430	35.0	47.5	4	5	3	12	0	
"	1500	35.0	47.5	5	3	2	10	2	
"	2015	25.0	25.5	0	1	0	1	0	Lights off - 1700. overhead lights on - 2015. (No heat lamps on)
"	2130	24.0	24.5	0	1	0	1	0	
"	2345	23.5	24.0	0	1	0	1	1	
3/31/61	0810	22.5	22.5	5	4	1	10	10	overheads only - 0810.
"	0815	22.5	22.5	9	11	5	25	1	Heat lamps on - 0820.
"	0835	29.0	29.5	9	12	8	29	0	Fed at 0845.
"	0900	29.0	33.5	9	8	7	24	0	
"	0925	30.5	37.5	7	7	8	22	0	

Date	Time	TEMP. (°C)		NUMBER			Total	No. Heads	Remarks
		Min.	Max.	notata	inornata	scoparia			
3/31/61	1115	33.0	44.5	3	3	4	10	1	
"	1135	33.5	45.0	2	3	2	7	1	
"	1200	33.5	45.0	1	2	3	6	1	All quiet & basking.
"	1230	34.0	46.0	1	1	2	4	3	" "
"	1300	34.0	46.0	1	1	2	4	3	" "
"	1330	34.0	46.0	3	2	2	7	0	" "
"	1400	34.0	46.5	4	3	2	9	0	Several moving about.
"	1435	34.5	47.0	4	6	3	13	1	most are active.
"	1500	34.5	47.0	5	6	4	15	0	" " "
"	1530	34.5	47.0	6	6	6	18	1	" " "
"	1600	34.5	47.0	7	6	3	16	0	several " "
"	1630	35.0	47.0	9	2	3	14	1	" " "
"	1700	35.0	47.0	6	5	1	12	0	" " "
4/5/61	1300	33.0	47.0	1	1	1	3	2	none active
"	1415	33.5	47.5	3	5	3	11	1	several active
"	1430	34.0	48.0	3	5	2	10	1	" "
"	1500	34.0	48.0	3	6	5	14	0	" "
"	1530	34.0	48.0	8	5	4	17	0	" "
"	1600	34.0	48.5	4	6	3	14	0	" "
"	1650	34.5	48.5	5	6	3	14	2	" "
"	1700	34.5	49.0	4	6	2	12	1	" "
4/6/61	0810	21.5	22.0	2	4	2	8	10	lights on - 0810 none
"	0815	22.0	23.0	9	11	4	24	3	several "
"	0830	28.0	28.0	12	13	6	31	0	" "
"	0900	28.0	34.0	11	6	4	21	1	" "
"	1010	30.5	42.0	4	4	0	8	1	" "
"	1030	31.0	43.0	3	5	2	10	3	" "
"	1135	32.5	46.0	2	4	0	6	4	none "
"	1200	33.0	47.0	2	4	1	7	2	" "
"	1230	33.0	47.0	4	3	0	7	2	2 "

Date	Time	TEMP.(°C.)		NUMBER				No. Heads	Remarks
		Min.	Max.	notata	inornata	scoparia	Total		
4/6/61	1300	33.5	47.5	2	2	0	4	3	2 active
"	1330	34.0	47.5	5	5	2	12	1	several "
"	1400	34.0	47.5	4	6	4	14	0	" "
"	1430	34.0	49.0	5	6	5	16	2	" "
"	1500	34.0	49.0	7	5	2	14	2	" "
"	1530	34.0	49.0	6	7	2	15	1	" "
"	1600	34.5	49.5	9	7	3	19	3	" "
"	1630	34.5	49.5	10	7	3	20	0	" "
"	1700	34.5	49.5	9	6	3	18	0	" "
"	1945	33.5	49.0	6	1	2	9	0	overhead lights off-1830. none active heat lamps on since 0810.
"	2220	25.0	27.0	0	asleep on surface	0	1	1	" " off-1955. overheads on since 1945.
4/7/61	0810	22.0	23.0	3	1	2	6	12	Lights on-0810
"	0815	23.0	26.0	8	7	4	19	5	Many active
"	0818	23.0	26.5	10	9	5	24	4	" "
"	0820	24.0	28.5	11	10	7	28	2	" "
"	0850	29.0	36.0	11	6	7	24	1	" "
"	0920	30.0	40.0	9	7	5	21	2	" "
"	1010	32.0	44.0	7	3	3	13	1	several "
"	1110	34.0	47.0	5	3	3	11	2	" "
"	1130	34.0	48.0	3	2	3	8	2	none "
"	1200	35.0	48.0	3	1	0	4	3	" "
"	1230	35.0	49.0	4	1	1	6	1	" "
"	1455	36.0	50.5	5	5	3	13	2	some "
4/13/61	0810	22.0	23.0	3	2	2	7	5	active active.
"	0820	23.0	28.0	9	8	7	24	0	SEVERAL ACTIVE.
"	1500	35.0	47.0	3	8	8	19	2	" "
4/18/61	0810	21.5	21.5	2	4	3	9	7	Lights on-0810
4/20/61	0850	28.0	36.0	10	9	12	31	6	Lights on-0805
4/21/61	0815	22.0	22.5	5	2	6	13	9	Lights on-0815
"	1110	32.0	46.0	4	1	4	9	3	

Date	Time	TEMP. (°C.)		NUMBER			Total	No. Heads	Remarks
		Min.	Max.	notata	inornata	scoparia			
4/21/61	1210	33.5	47.0	4	1	1	6	2	None active
"	1300	34.0	47.5	6	3	4	13	1	" "
4/24/61	0810	22.0	22.0	0	0	0	0	8	Lights off since 4/20/61. Lights on - 0810
"	0815	22.0	25.0	2	3	1	6	10	
"	0820	23.0	27.0	6	7	3	16	4	All quiet, soaking up heat
"	0835	24.0	30.0	9	14	10	33	2	Most are active
"	1010	31.0	44.0	10	5	2	17	4	Few active
"	1030	31.5	45.0	7	7	2	16	2	" "
"	1100	32.0	46.0	11	4	3	18	0	" "
4/25/61	0800	22.0	22.0	0	0	2	2	16	Lights on - 0800 None "
"	0810	22.5	26.5	8	9	6	23	2	Few "



R-371

STEEL BACKPLATE

S. E. & M. VERNON, INC.

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